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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,773	07/27/2001	Russell J. Henry	01-203	8535

7590

01/15/2004

PETER SCOTT
 INTELLECTUAL PROPERTY LAW DEPARTMENT
 LSI LOGIC CORPORATION
 M/S D-106, 1551 McCARTHY BLVD.
 MILPITAS, CA 95035

EXAMINER

RAY, GOPAL C

ART UNIT	PAPER NUMBER
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2111

DATE MAILED: 01/15/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/916,773

Applicant(s)

HENRY ET AL.

Examiner

Gopal C. Ray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner *draftsperson*.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

1. Claims 1- 20 are presented for examination.
2. The drawings filed on 7/27/01 are objected to by the USPTO draftsman. See PTO-948 for objections to the drawings. The drawings are acceptable for examination purposes only. Formal drawings will be required when the application is allowed. Direct any inquiries concerning drawing review by the USPTO draftsman to the Drawing Review Branch at (703) 305-8404.
3. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification. Furthermore, all claims should be revised carefully to eliminate all grammatical errors and antecedent basis problems.
4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7 and 15-19 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,570,348 issued to Holden.

As per claim 1, Holden teaches “an external electronic device suitable for performing function” in Fig. 3, elements 50 and 52; “a controller, the controller including at least one internal module, the internal module providing a controller function” in Fig. 4, element 30; and “a fabric connection communicatively connecting the external device

to the controller, wherein the module of the controller is directly accessible by the external electronic device" in Figures 2 and 3.

As per claim 2, the reference of Holden teaches the added feature in Fig. 11.

As per claim 3, the reference of Holden teaches the added feature in col. 5, lines 8-10.

As per claims 4-5, the reference of Holden inherently teaches the added features in col. 2, lines 52-57.

As per claim 6, the reference of Holden teaches the added feature in Fig. 2

As per claim 7, the reference of Holden teaches the added feature in col. 14, lines 55-57. .

As per claim 15, the claim is rejected for similar reasons as discussed in the rejection of claim 1 with the exception of the limitation "first and second external devices". However, the reference of Holden teaches the feature in Fig. 3, elements 50 and 52.

As per claims 16-19, the added limitations of the claims are rejected for the same reasons as discussed in the rejection of claims 2-4 and 6 respectively.

6. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-14 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 5,570,348 issued to Holden in view of US Patent 6,542,954 issued to Aruga.

As per claim 8, the claim is rejected for similar reasons as discussed in the rejection of claim 1 with the exception of the limitation "directly converting from an external electronic device protocol to an internal storage array controller protocol suitable for communicating with the internal module". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Aruga. The reference of Aruga teaches the feature in Fig. 3 and col. 3, lines 53-58. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the above feature of Aruga in the system of Holden because both the prior art systems are analogous to improving switch fabric architecture and the above feature of Aruga would enable the system of Holden one-to-one connectivity between units and controllers of different protocols for the desirable purpose of versatility. The reference of Aruga teaches the motivation in the abstract of the disclosure.

As per claims 9-14, the added limitations of the claims are rejected for the same reasons as discussed in the rejection of claims 2-7 respectively.

As per claim 20, the claim recites a method which parallels apparatus claim 1 with the exception of a "disk array controller". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Aruga. The reference of Aruga teaches the feature in Fig. 3, elements 4(1,1) – 4(1,L). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the above feature of Aruga in the system of Holden because both the prior art systems are analogous to improving switch fabric

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architecture and the above feature of Aruga would allow the system of Holden to use a "disk array controller" for the desirable purpose of versatility. The reference of Aruga teaches the motivation in the abstract of the disclosure.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure. Furthermore, applicant is reminded of the duty to disclose as set forth in 37 CFR § 1.56.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (703) 305-9647. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (703) 305-4815. The new fax phone number for this Group is (703) 872-9306.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to **[mark.rinehart@uspto.gov]**.

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC2100 receptionist whose telephone number is (703) 305-3900.

Gopal C. Ray
GOPAL C. RAY
PRIMARY EXAMINER
GROUP 2300